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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,814	07/29/2003	Richard E. Staerzl	M09692	9028

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EXAMINER

BELL, BRUCE F

ART UNIT PAPER NUMBER

1746

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,814

Applicant(s)

STAERZL ET AL.

Examiner

Bruce F. Bell

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Boyd et al (US 2004/0231975).

Boyd et al is as set forth in the previous office action.

Boyd et al discloses that the UNISHIELD conductive coating comprises an emulsion binder, which is a blend of a first emulsion containing a conjugated diene monomer or co-monomer and a second emulsion containing an acrylic polymer and also contains an effective amount of electrically conductive particles dispersed in the binder with water as a carrier. The electrically conductive particles include a combination of graphite particles and metal containing particles, the graphite particles being natural flake graphite and the metal containing particles being silver or nickel. The second emulsion of the polymer binder being selected from **any** of an acrylic, aliphatic or aromatic polyurethane, polyester urethane, **polyester**, epoxy, polyamide, polyimide, **vinyl**, modified acrylic, fluoropolymer and silicone polymer, **or combination thereof**. In the

conductive coating composition, the electrically conductive particles can be chosen from graphite or carbon nanotubes and metal containing particles or a combination thereof. See paragraphs [0025-0026].

Applicants have not presented any arguments as to why they think that Boyd et al does not anticipate their instant invention. They simply state that the claims as not written remain allowable over the Boyd et al publication. The examiner disagrees with this assessment. As can be seen the apparatus of Boyd et al has a coating disposed on a surface of a submersible object (ship, vessel or aquatic structure), wherein the coating is an electrically conductive polymer based material of UNISHIELD. An electrode, an electrical current source connected to the first coating and the electrode and forms an electrical circuit with the coating, electric current source, electrode and water in which the coating is disposed and the publication further discloses that the electrically conductive polymer based material is a nonconductive polymer matrix with electrically conductive particles disposed therein. Further, the publication teaches that the non conductive polymer matrix is either a vinyl or a polyester or a combination thereof, which is being construed to be the vinyl ester as set forth. Therefore, the prior art of Boyd et al anticipates the applicants instant invention as set forth above with respect to the instant claims as presented.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyd et al (2004/0231975) in combination with Staerzl (6547952) and Sahr et al (6367406).

Boyd et al is as set forth in the previous office action and additionally the disclosure set forth above.

Boyd et al does not disclose the specific construction of the boat hull.

Sahr et al disclose that the boat hull is made of a fiberglass layer, a barrier coat layer and a gelcoat layer, where the barrier coat layer is used to prevent the fibrous reinforcing material from printing or pressing through the gel coat layers.

See col. 6, lines 51-61.

Staerzl is disclosed to show a boat hull that has two portions that can be electrically isolated from one another and connected only through an electrical circuit, so that the two surfaces provide first and second electrically conductive surfaces that alternatively are connected as the anode and cathode in the electrical circuit. A protective coating is shown to be used on the conductive surface of the boat hull. See col. 12, lines 23-41. The electrical circuit comprises an electrically conductive surface, the electric current source, the electrode and the water in which both the electrode and the electrically conductive surface are disposed. See col. 12, lines 1-4.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the instant invention was made because even though the prior art of Boyd et al does not disclose the specific construction of the boat hull, it is known as shown by Sahr that boat hulls are made in such a manner so as to protect the boat hull from the reinforcing material from pressing into the gel coat layer, and that further, it is known in the art to make both the starboard and port sides of the ships of the same materials, since the overall construction is the same. The prior art of Staerzl is disclosed to show that it is known to make an electrical circuit on both the starboard and port sides of the boat hull and to provide both surfaces with an electrically conductive material as well as a protective coating. Since the Boyd et al publication shows that it is known to use UNISHIELD technology to protect and to aid in the prevention of biofouling on the surface of an aquatic vehicle or structure, it would have been within the ability of the person having ordinary skill in the art to use both the specific boat hull structure and electrical circuitry as set forth in both Sahr and Staerzl with their UNISHIELD technology for the purpose of providing an improved apparatus for inhibiting fouling of the boat hull or aquatic structure, since the boat hull technology, electrically circuitry to prevent fouling, and new protection layer are all known to be used in connection with the prevention of fouling of a submerged structure.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 lacks antecedent basis for the phrases "said matrix material" and "said conductive particles".

Correction and/or clarification are requested.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce F. Bell whose telephone number is 571-272-1296. The examiner can normally be reached on Monday-Friday 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BFB
October 19, 2006


Bruce F. Bell
Primary Examiner
Art Unit 1746